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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,206	02/27/2004	Jeffrey L. Antle	25238B	9077
22889	7590	02/11/2008	EXAMINER	
OWENS CORNING			GRAY, JILL M	
2790 COLUMBUS ROAD			ART UNIT	
GRANVILLE, OH 43023			PAPER NUMBER	
			1794	
			MAIL DATE	
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			02/11/2008	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/789,206

**Applicant(s)**

ANTLE ET AL.

**Examiner**

Jill Gray

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,6-19 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-19 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

The rejection of claims 1, 3, 7-9, 11, and 13-16 under 35 U.S.C. 103(a) as being unpatentable over Collin 6,482,400 B1 is withdrawn in view of applicants' amendments and arguments.

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3-4, 6-19, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirchmeyer et al., 5,811,480 (Kirchmeyer) in view of Girgis et al., 4,762,750 (Girgis).

Kirchmeyer teaches a sizing composition for glass fibers, a method of making said aqueous sizing composition, a fiber product and method of forming a sized glass fiber, said sizing composition comprising 2 to 20 wt% of film former which can be polyurethane, 0.1 to 10 wt% organosilane coupling agent, 0.1 to 20 wt% further conventional size constituents and water to make up 100 wt%, as required by claims 1, 11, 17-18, and 22-23. The polyurethane can be a polyether based polyurethane and in the form of a dispersion, emulsion or solution as required by the present claims. Also, Kirchmeyer teaches that the organosilane coupling agent is of the type contemplated by applicants in claim 6, such as vinyltrimethoxysilane and that lubricants such as polyalkylene glycol ester and polyalkylene imine can be added, per claims 3, 7, 10, 12, 19, and 24. See column 3, line 50 through column 4 and line 65. In addition,

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Kirchmeyer teaches that "the size may contain further components such as emulsifiers, further film-forming resins, further coupling agents, lubricants and auxiliary substances" See entire document, and for example, column 2, line 51 through column 3 and line 2.

Kirchmeyer does not specifically polyamide as the additional film former or the specific non-ionic lubricant and partially amidated polyalkylene imine.

Girgis teaches a conventional aqueous sizing composition for glass fibers comprising a film forming polymer that can be a polyamide, organosilane coupling agents, cationic lubricants such as an alkyl imidazoline derivative produced as a reaction product of stearic acid and tetraethylene pentamine stearic acid, nonionic lubricants such as polyoxyethylene sorbitan monolaurate, and polyurethane. See entire document and in particular columns 5-6 and Examples.

Aqueous sizing compositions for glass fibers and their conventional size components are well known in the art. Kirchmeyer teaches that conventional size constituents and additional film forming materials can be included. It would have been obvious to one having ordinary skill in the art to modify the composition of Kirchmeyer by including an additional film forming polymer selected from among those known in the art as conventional film forming materials, such as polyamide as taught by Girgis to obtain the predictable results of a sizing composition having a fiber protectorant. As to claims 4, 8, and 25, Girgis teaches that lubricants of the type contemplated by applicants are known in the art. It is the examiner's position that the specific nonionic lubricant and cationic lubricant are no more than a preferential selection of one nonionic lubricant and cationic lubricant from among many being used for its art recognized

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purpose. Hence, the requirements of present claims 4, 8, and 25 are not construed to be a matter of invention in the absence of factual evidence to the contrary.

Regarding claim 9, the composition of the prior art is substantially similar to that contemplated by applicants. Therefore, the examiner has reason to believe that properties such as an increase in compatibility between the glass fibers and a matrix resin are the same as well in the absence of factual evidence to the contrary.

Regarding claims 13 and 15, it is the examiner's position that changes in time and temperature ordinarily are not a matter of inventions in the absence of clear factual evidence to the contrary.

Therefore, the combined teachings of Kirchmeyer and Girgis would have rendered obvious the invention as claimed in present claims 1, 3-4, 6-19, and 23-25.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1, 3-4, 6-19, and 23-25 have been considered but are moot in view of the new ground(s) of rejection.

No claims are allowed.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See all documents on PTO-892.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jill Gray  
Primary Examiner  
Art Unit 1794

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Primary Examiner, Art Unit 1794